CLAIMS

- 1. Arylsulphonamide derivative, characterized in that it is chosen from among the group consisting of:
 - a) products of formula:

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 R_1 represents an aromatic system that is non-substituted or substituted by one or more atoms or groups of atoms chosen from among the halogens, C_1 - C_3 alkyl groups, C_1 - C_3 alcoxy groups, nitro, cyano, trifluoromethyl or trifluoromethoxy, R_2 represents a hydrogen atom or a C_1 - C_4 alkyl group optionally substituted by a phenyl group, by a CONH₂ group or by one or more fluorine atoms, R_3 represents a hydrogen atom, a hydroxy group, or with R_4 forms a -CH=N-group or a straight or branched C_2 - C_4 alkylene group, R_4 represents a hydrogen atom or with R_3 forms a -CH=N- group or a straight or branched C_2 - C_4 alkylene group,

 R_5 represents a hydrogen atom or a C_1 - C_3 alkyl group,

R₆ represents a hydrogen atom or a halogen,

Y represents a $C_2\text{-}C_4$ alkylene group, satured or unsatured, straight or branched, optionally interrupted between two carbon atoms by an oxygen atom

- b) the addition salts of the above formula I compounds with an acid.
 - 2. Compound as in claim 1, characterized in that R_1 represents a phenyl group substituted by one or more atoms or groups of atoms chosen from among a

halogen atom, preferably the chlorine atom, and C_1 - C_3 alkyl groups and C_1 - C_3 alkoxy groups.

- 3. Compound as in claim 1 or 2, characterized in that R_2 represents a C_1 - C_4 alkyl group.
 - 4. Compound as in any of claims 1 to 3, characterized in that R_3 and R_4 together form a C_2 - C_3 alkylene group.
- 5. Compound as in any of claims 1 to 4, characterized in that R_5 and R_6 each represent a hydrogen atom.
 - 6. Compound as in any of claims 1 to 5, characterized in that Y represents a saturated C_2 - C_4 alkylene chain optionally interrupted by an oxygen atom.
 - 7. Compound as in claim 6, characterized in that Y represents a $-(CH_2)_4$ group.
 - 8. Compound as in claim 6, characterized in that Y represents a $-(CH_2)_2$ -O- CH_2 -group.
 - 9. Method for preparing a formula I compound such as defined in claim 1, and its addition salts, comprising the steps consisting of:
 - a) reacting an acid of formula:

$$R_1$$
 N COOH R_2

II

in which

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 R_1 represents an aromatic system that is non-substituted or substituted by one or more atoms or groups of atoms chosen from among the halogens, C_1 - C_3 alkyl groups, C_1 - C_3 alkoxy groups, nitro, cyano, trifluoromethyl or trifluoromethoxy,

 R_2 represents a hydrogen atom, a C_1 - C_4 alkyl group optionally substituted by a phenyl group, by a CONH₂ group or by one or more fluorine atoms,

and Y represents a C_2 - C_4 alkylene group, saturated or unsaturated, straight or branched, optionally interrupted between two carbon atoms by an oxygen atom,

with an amine of formula:

$$H - N - CH_{2} \longrightarrow \begin{array}{c} R_{6} & N - R_{3} \\ N \subset R_{4} & N \subset R_{4} \\ R & S \end{array}$$

III

in which

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 R_3 represents a hydrogen atom or with R_4 forms a straight or branched C_2 - C_4 alkylene group,

 R_4 represents a hydrogen atom or with R_3 forms a straight or branched C_2 - C_4 alkylene group,

 R'_5 represents a C_1 - C_3 alkyl group, a hydrogen atom or an amino-protecting group,

R₆ represents a hydrogen atom or a halogen,

the reaction being conducted in a solvent in the presence of at least one activator agent at a temperature generally lying between room temperature and 60°C and preferably for approximately 2 to 15 hours to obtain the amide of formula:

IV

in which R_1 , R_2 , R_3 , R_4 , R'_{5} , R_6 and Y maintain the same meanings as in the starting products,

- b) if necessary, when the substituent R_5' is an amino-protecting group, reacting the formula IV compound so as to remove the amino-protecting group and replace it by a hydrogen atom, thereby obtaining the formula I compound in which R_5 represents a hydrogen atom,
- c) if necessary, reacting the formula IV or formula 1 compound obtained above with a mineral or organic acid to obtain the addition salt of the formula IV or formula I compound.
- 10. Therapeutic composition, characterized in that, in association with at least one physiologically suitable excipient, it contains at least one formula I compound according to any of claims 1 to 8, or one of its pharmaceutically acceptable addition salts with an acid.
- 11. Use of a formula I compound as in any of claims 1 to 8, or of one of its pharmaceutically acceptable addition salts with an acid, for the preparation of a medicinal product intended to treat pain.
 - 12. Use of a formula I compound as in any of claims 1 to 8, or of one of its pharmaceutically acceptable addition salts with an acid, for the preparation of a medicinal product intended to treat inflammatory diseases.

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